

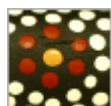
## 6287.0 - Labour Force Characteristics of Aboriginal and Torres Strait Islander Australians, Estimates from the Labour Force Survey, 2010

Previous ISSUE Released at 11:30 AM (CANBERRA TIME) 29/06/2011

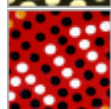
## Summary

### Contents

#### CONTENTS

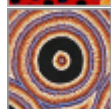


#### In this Issue



#### Concepts, Sources and Methods

Includes the labour force classifications of participants in the reformed Community Development Employment Programs (CDEP) scheme



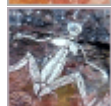
#### Participation

In 2010, an estimated 202,700 Indigenous people were in the labour force. This represents an Indigenous labour force participation rate of 56%.



#### Employment

There were an estimated 166,100 Indigenous people employed in 2010, which was 46% of the Indigenous population.



#### Unemployment

In 2010, the unemployment rate for the Indigenous population remained steady at 18%, with an estimated 36,600 unemployed.



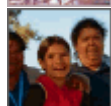
#### Comparisons with Non-Indigenous Estimates

There are a number of considerations when making comparisons between the labour force characteristics of Indigenous and non-Indigenous people.



#### Other Sources of Information

Although the estimates available from other ABS collections are based on the same underlying concepts as the LFS, there are important differences which affect the comparability of data



#### Suggestions and Feedback

As part of a review of Labour Force products, we are currently seeking user feedback and suggestions on the format and contents of this publication.

## Notes

#### NOTES

#### ABOUT THIS PUBLICATION

This publication presents information about the labour force characteristics of Aboriginal and Torres Strait Islander Australians. Information on labour force characteristics is presented by state or territory, remoteness, males and females, and age.

The estimates in this publication were compiled from the monthly Labour Force Survey, conducted throughout Australia by the Australian Bureau of Statistics (ABS). Results from each monthly collection have been combined to produce annual estimates.

Previously published estimates released in earlier editions of **Labour Force Characteristics of Aboriginal and Torres Strait Islander Australians** (cat. no. 6287.0), are not strictly comparable with the estimates in this release due to:

- revisions to Indigenous population estimates, which are currently based on the September 2009 release of **Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021** (cat. no. 3238.0);
- revisions to non-Indigenous population estimates, which are currently based on the Jun 2010 release of **Australian Demographic Statistics, Jun 2010** (cat. no. 3101.0);
- revisions to geographical remoteness, which is currently based on the latest **Australian Standard Geographical Classification (ASGC), July 2010** (cat. no. 1216.0); and
- changes in methodology for estimates published for 1994-2000.

The Labour Force Survey has methodological and definitional differences when compared with other sources of Indigenous Labour Force data, such as

- **Census of Population and Housing, 2006**
- **National Aboriginal and Torres Strait Islander Social Survey (NATSISS), 2008** (cat. no. 4714.0)
- **National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), 2004-05** (cat. no. 4715.0)

The differences in the methodologies used affect the comparability of the estimates. These are discussed in Other Sources of Information.

## ROUNDING

As estimates have been rounded, discrepancies may occur between sums of the component items and totals.

## INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070, email [client.services@abs.gov.au](mailto:client.services@abs.gov.au) or Aaron Greenup on Canberra (02) 6252 6525, email [labourforce@abs.gov.au](mailto:labourforce@abs.gov.au)

# About this Release

This publication provides estimates of the labour force characteristics of Aboriginal and Torres Strait Islander Australians using data from the Labour Force Survey. The publication also draws attention to statistical and data quality issues that should be considered when using the estimates.

## Expanded Contents

### CONTENTS

#### In this Issue

- Comparison to Previous Issues

- Statistical Issues

- Other ABS Data Collections

#### Concepts, Sources and Methods

- Questionnaire

- Sample Size

- Sample Design

- Estimation

- Employment (concept)

- Community Development Employment Projects (CDEP)

- Unemployment (concept)

- Reliability of Estimates

- Standard Errors

#### Participation

#### Employment

#### Unemployment

#### Comparisons with non-Indigenous Estimates

- Comparisons with non-Indigenous population

- Comparisons with total population estimates

#### Other Sources of Information

- Previous Releases

- Census of Population and Housing

- National Aboriginal and Torres Strait Islander Social Survey (NATSISS)

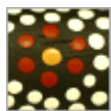
- National Aboriginal and Torres Strait Islander Health Survey (NATSIHS)

- Future Data Collections

#### Suggestions and Feedback

## In this Issue

[Contents >> In this Issue](#)



## IN THIS ISSUE

[Next Section: Concepts, Sources and Methods >>](#)

### INTRODUCTION

This publication presents information about the labour force characteristics of Aboriginal and Torres Strait Islander Australians aged 15 years and over. The information is based on data collected by the Australian Bureau of Statistics (ABS) in its monthly Labour Force Survey (LFS). This issue is the first release of estimates for 2010 and also contains revised estimates for 2008 and 2009 based on the most recent civilian population estimates.

The monthly LFS is the main source of information about the labour force status of Australia's civilian population. The labour force estimates for Aboriginal and Torres Strait Islanders in this publication were produced by combining the LFS samples for each of the 12 months of a calendar year to produce annual estimates.

This section contains the following subsection :

- Comparison to Previous Issues
- Statistical Issues
- Other ABS Data Collections

[Previous Page](#)

[Next Page](#)

## Comparison to Previous Issues

[Contents >>](#) [In this Issue >>](#) [Comparison to Previous Issues](#)

### COMPARISON TO PREVIOUS ISSUES

Previously published estimates released in earlier editions of **Labour Force Characteristics of Aboriginal and Torres Strait Islander Australians** (cat. no. 6287.0), are not strictly comparable with the estimates in this release due to:

- revisions to Indigenous population estimates, which are currently based on the September 2009 release of **Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021** (cat. no. 3238.0);
- revisions to non-Indigenous population estimates, which are currently based on the Jun 2010 release of **Australian Demographic Statistics, Jun 2010** (cat. no. 3101.0);
- revisions to geographical remoteness, which is currently based on the latest **Australian Standard Geographical Classification (ASGC), July 2010** (cat. no. 1216.0); and
- changes in methodology for estimates published for 1994-2000.

## Statistical Issues

[Contents >>](#) [In this Issue >>](#) [Statistical Issues](#)

### STATISTICAL ISSUES

To help in the interpretation of these estimates, this publication also draws attention to a number of statistical issues that need to be considered when using LFS estimates to describe Indigenous labour force characteristics. These have an impact on the relevance, quality and reliability of Indigenous estimates from the LFS.

Some of these statistical issues arise because the LFS is designed primarily to provide reliable estimates of key labour force aggregates for the whole of Australia and, secondarily, for each state and territory, rather than estimates for small populations or small geographic areas. The small number of the Indigenous population and its wide dispersion, together with the relatively high proportion who live in remote areas present particular difficulties in producing reliable labour force estimates for the Indigenous population.

There are also some practical difficulties with applying the standard LFS concepts and definitions and using the standard LFS survey questions in Indigenous communities, particularly in remote regions.

In addition, the small sample of Indigenous Australians identified in the LFS, even when aggregated across the year, has implications for the reliability of the survey estimates.

These issues are discussed further in [Concepts, Sources and Methods](#)

## Other ABS Data Collections

[Contents >>](#) [In this Issue >>](#) [Other ABS Data Collections](#)

### OTHER ABS DATA COLLECTIONS

Additional information on the labour force status of Indigenous Australians is also available from a number of other ABS data collections, including:

- **Census of Population and Housing, 2006**
- **National Aboriginal and Torres Strait Islander Social Survey (NATSISS), 2008**  
(cat. no. 4714.0)
- **National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), 2004-05**  
(cat. no. 4715.0)

Although the labour force statistics from these data sources are based on the same underlying concepts as the LFS, there are differences in the methods used which affects the

comparability of the data.

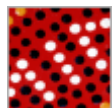
Broad estimates from these sources, and the methodological and definitional differences, are presented in Other Sources of Information.

[Previous Page](#)

[Next Page](#)

## Concepts, Sources and Methods

[Contents >> Concepts, Sources and Methods](#)



### CONCEPTS, SOURCES AND METHODS

[<< Previous Section: In this Issue](#)

[Next Section: Participation >>](#)

#### INTRODUCTION

Information about the labour force characteristics of the Aboriginal and Torres Strait Islander population has been collected in the LFS using international standards for defining and measuring employment and unemployment. The distinction between paid and unpaid work is fundamental to these definitions. As a result, the definitions may not always give adequate recognition to the 'unpaid' activities which some people undertake. However, the use of standard definitions across all population groups is seen as important for ensuring objectivity and uniformity in measuring Australia's labour force.

This section provides information on issues specific to Indigenous estimates from the LFS. Information on the methodology and concepts used in the LFS more generally are presented in the Explanatory Notes section with additional detail published in **Labour Statistics: Concepts, Sources and Methods** (cat. no. 6102.0.55.001).

This section contains the following subsection :

- Questionnaire
- Sample Size
- Sample Design
- Estimation
- Employment (concept)
- Community Development Employment Projects (CDEP)
- Unemployment (concept)
- Reliability of Estimates
- Standard Errors

[Previous Page](#)

[Next Page](#)

## Questionnaire

[Contents >> Concepts, Sources and Methods >> Questionnaire](#)

## QUESTIONNAIRE

In the LFS, information is generally collected by specially trained interviewers using a standard LFS questionnaire from people in dwellings selected in the LFS. The questionnaire used in the survey is published in **Information Paper: Questionnaires used in the Labour Force Survey** (cat. no. 6232.0).

Special procedures are used to collect information in some Indigenous communities in remote areas to minimise respondent load and achieve maximum cooperation and response rates. In particular, a 'short form', which collects the minimum data required to derive basic labour force characteristics, is available for use when interviewers encounter significant cultural, language or operational difficulties in remote areas.

From April 2001, the monthly LFS has included a question on Indigenous status. This has enabled information on the Indigenous status of respondents to be collected for each month of the survey, increasing the amount of information available on Indigenous people from the LFS.

The question asked to determine Indigenous status is:

- Is ... of Aboriginal origin, Torres Strait Islander origin or both?

Although the question on Indigenous origin allows people to identify as being of Aboriginal origin only, Torres Strait Islander origin only, or as both Aboriginal and Torres Strait Islander origin, it is not feasible to derive separate labour force statistics for these three groups because of the small numbers of Indigenous people in the LFS sample.

[Previous Page](#)

[Next Page](#)

## Sample Size

[Contents](#) >> [Concepts, Sources and Methods](#) >> [Sample Size](#)

### SAMPLE SIZE

Between 2008 and 2010, the LFS had a monthly sample ranging from 41,000 to 61,000 people aged 15 years and over, in urban, rural and remote areas across all states and territories of Australia. This sample range is due to a 24% sample cut that was introduced in June 2008, and was later reinstated between September and December 2009. Further information about the sample cut and reinstatement can be found in **Information Paper: Labour Force Survey Sample Design** (cat. no. 6269.0)

The LFS sample size is sufficient to provide reliable monthly estimates of level and change in the major labour force characteristics of the total population for Australia and for each state and territory. However, the survey sample is not specifically designed to provide monthly estimates for small population groups, such as the Indigenous population, or for small geographic areas.

The methodology used to produce the labour force estimates for Indigenous Australians is based on combining the LFS samples for each of the twelve months of the year. This pooling has resulted in a sample of between 10,500 and 13,900 records each year. This

sample size is adequate for providing broad aggregates of labour force characteristics at the state and territory level. However, the sample size per year is still quite small, resulting in constraints on the level of disaggregated data available from the survey.

Note that as the sample is pooled from monthly data throughout the year, and most people are interviewed for the LFS in more than one month (up to eight consecutive months), the number of individuals interviewed each year (approx. 3,700 in 2010) is substantially lower than the sample used to produce the estimates (13,900 in 2010).

[Previous Page](#)

[Next Page](#)

## Sample Design

[Contents >> Concepts, Sources and Methods >> Sample Design](#)

### SAMPLE DESIGN

In remote areas of Australia, the LFS sample is more clustered than in non-remote areas, so that the majority of the survey's sample of Indigenous people living in remote areas tends to be concentrated in a relatively small number of clusters. This has significant implications for estimates for Indigenous people in remote areas.

There is a high degree of variability in employment opportunities between Indigenous communities, while employment opportunities for people within a particular Indigenous community are likely to be similar.

Due to the small number of Indigenous communities selected in the LFS, there is the potential for wide statistical fluctuations in estimates of labour force characteristics of remote Indigenous communities over time if the sample moves from communities with strong employment opportunities to those which do not (and vice versa).

[Previous Page](#)

[Next Page](#)

## Estimation

[Contents >> Concepts, Sources and Methods >> Estimation](#)

### ESTIMATION

As part of the estimation process, the LFS estimates of Indigenous persons employed, unemployed and not in the labour force are calculated in such a way as to add to independent estimates of the size and structure of the Indigenous population. Independent population estimates (benchmarks) for the Indigenous population aged 15 years and over by sex, broad age groups and remoteness type, for each state and territory of Australia, as at 30 June, were used for each year of estimates. These benchmarks reflect the low series population projections based on the 2006 Census as published in **Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021** (cat. no. 3238.0).

These projections are not predictions or forecasts, but are projections of Census data



reflecting the growth in population which would occur if certain assumptions about future levels of fertility, mortality, migration and unexplained growth were to prevail over the projection period.

Where data in this publication are presented by geographic area (such as remoteness, or state or territory), the data are based on a respondent's place of enumeration (i.e. the location of where the respondent was interviewed for the survey).

[Previous Page](#)

[Next Page](#)

## Employment (concept)

[Contents >> Concepts, Sources and Methods >> Employment \(concept\)](#)

### EMPLOYMENT

In the LFS, employment is defined as working for at least one hour, either

- for pay or profit, or
- as unpaid work in a family business; or
- being absent from work but remaining formally attached to a job.

Persons who participate in labour market programs are counted as employed, unemployed or not in the labour force according to how they respond to questions in the LFS about their actual activity in the week before interview.

[Previous Page](#)

[Next Page](#)

## Community Development Employment Projects (CDEP)

[Contents >> Concepts, Sources and Methods >> Community Development Employment Projects \(CDEP\)](#)

### COMMUNITY DEVELOPMENT EMPLOYMENT PROJECTS (CDEP)

The Community Development Employment Projects (CDEP) scheme is a program provided by the Federal Government for (primarily) Aboriginal and Torres Strait Islander people living in remote, rural and urban areas. It enables an Indigenous community or organisation to pool the unemployment benefit entitlements of individuals into direct wages for those people who choose to participate in local employment in various community development or organisation programs as an alternative to receiving individual income support payments.

Prior to July 2009, the relationship between CDEP organisations and the individual participants who were undertaking paid work was treated by ABS as an employer/employee relationship. The individual participants were considered to be in paid employment, even though they were paid for their work from funds originating from unemployment benefits.

From July 2009 onwards, the CDEP scheme was discontinued in non-remote locations where the economy is well established. Individuals in these communities who were formerly paid wages under CDEP and are now instead receiving alternative income support benefits are no longer considered to be employed, unless they have commenced another form of paid employment.

In remote communities, CDEP will continue to operate until April 2012, but new participants to the scheme will receive income support benefits instead of CDEP wages. Participants who joined prior to July 2009 and are still receiving CDEP wages will continue to be classified as employed, but new participants are not considered to be in an employer/employee relationship and will not be classed as employed by their CDEP participation.

[Previous Page](#)

[Next Page](#)

## Unemployment (concept)

[Contents >> Concepts, Sources and Methods >> Unemployment \(concept\)](#)

### UNEMPLOYMENT

The definition of unemployment is based around the concepts of

- actively looking for work, and
- being available to start work.

Where job opportunities are scarce or may not exist, such as in some remote parts of Australia, there may be little incentive to actively look for work. As a result, there may be relatively little unemployment measured in such regions, with the population who are not employed falling mainly into the 'not in the labour force' category.

[Previous Page](#)

[Next Page](#)

## Reliability of Estimates

[Contents >> Concepts, Sources and Methods >> Reliability of Estimates](#)

### RELIABILITY OF ESTIMATES

When reading the following sections on Participation, Employment and Unemployment, or using the detailed data presented in the Tables (available in Downloads), it is important to consider the relative strengths and weaknesses of the LFS as a data source for Indigenous labour force information.

It is also important to remember that all LFS estimates are subject to sampling errors. This is particularly relevant to these Indigenous estimates because of the small size of the

Indigenous population and the small number of Indigenous persons in the LFS sample.

These estimates are also subject to non-sampling errors due to particular collection difficulties in remote areas, in addition to imperfections in reporting, recording or processing of data that can occur in any survey or census.

It is also important to note that the population benchmarks used for compiling Indigenous labour force estimates are not predictions or forecasts, but are projections of 2006 Census data reflecting the growth in population which would occur if certain assumptions about future levels of fertility, mortality, migration and unexplained growth were to prevail over the projection period.

[Previous Page](#)

[Next Page](#)

## Standard Errors

[Contents >> Concepts, Sources and Methods >> Standard Errors](#)

### STANDARD ERRORS

The Technical Note provides more information about the reliability of estimates based on a sample survey. However, in general terms, very small estimates are subject to high sampling errors (relative to the size of the estimate).

Estimates with a relative standard error (RSE) of 25% or greater would not be suitable for most practical purposes. These estimates are marked with annotations in Tables 1 to 5 (available in Downloads). The actual standard errors for level estimates are also provided as a separate worksheet in the Tables.

Comparisons over time of Indigenous labour force characteristics should be interpreted with particular caution. It is important to take into account the high standard errors associated with annual movements. For example, the estimated number of Indigenous people employed increased from 161,200 in 2009 to 166,100 in 2010. However, the standard error on this movement (6,000) means that this increase is not statistically significant.

The standard errors of the year to year movements are included as a separate worksheet in Tables 1 to 5 (available in Downloads).

[Previous Page](#)

[Next Page](#)

## Participation

[Contents >> Participation](#)



### PARTICIPATION

[<< Previous Section: Concepts, Sources and Methods](#)

[Next Section: Employment >>](#)

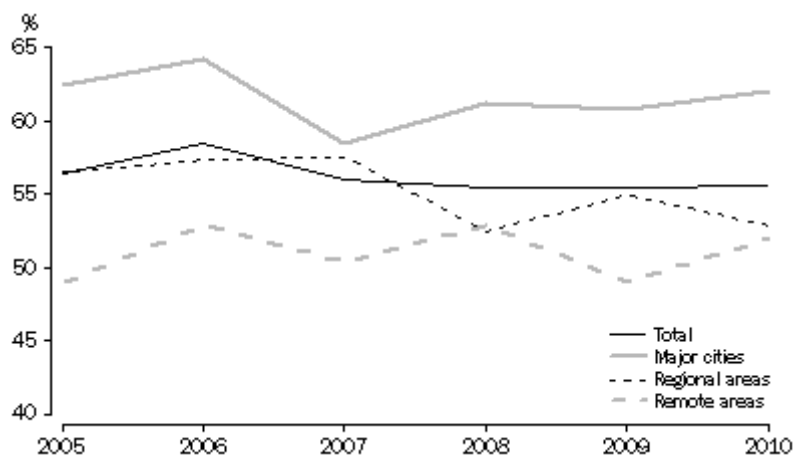
In 2010, an estimated 202,700 Indigenous people were in the labour force (i.e. either employed or unemployed). This represents a labour force participation rate for all Indigenous people aged 15 years and over of 56%.

Of the Indigenous people in the labour force, more lived in Regional areas (82,200 people) than in Major Cities (73,200) or Remote areas (47,200). However, the participation rate was significantly higher in Major Cities (62%) compared with both Regional (53%) and Remote Areas (52%).

Males accounted for 55% of the Indigenous labour force and the labour force participation rate for Indigenous males (62%) was significantly higher than the participation rate for Indigenous females (50%).

The participation rate for Indigenous people aged 25-44 years in 2010 (68%) was significantly higher than the rate for Indigenous people aged 15-24 years (49%) and 45 and over (47%).

**PARTICIPATION RATE, Indigenous persons aged 15 years and over - 2005 to 2010**



For more detailed estimates of Aboriginal and Torres Strait Islander labour force participation, refer to Tables 1 to 5 (available in Downloads).

[Previous Page](#)

[Next Page](#)

# Employment

[Contents >> Employment](#)



## EMPLOYMENT

[<< Previous Section: Participation](#)

[Next Section: Unemployment >>](#)

In 2010, there were an estimated 166,100 Indigenous people aged 15 years and over who were classified as employed. This represented 46% of the Indigenous population aged 15 years and over.

The employment to population ratio for Indigenous males fell to 49% in 2010 which is the fourth consecutive drop since 2006. The employment to population ratio for Indigenous females remained relatively steady at 42%.

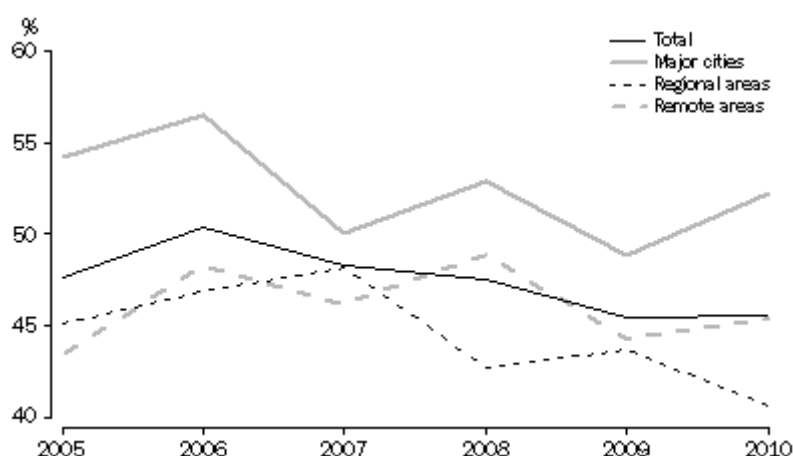
In Major Cities, the employment to population ratio for the Indigenous population was 52% (61,700 people), in Regional areas it was 41% (63,100 people) and it was 45% (41,200 people) in Remote areas.

The employment to population ratio of Indigenous males living in Major cities was unchanged at 55%, in Regional areas it decreased 7 points from 2009 to 44% in 2010 and in Remote areas it increased 5 points to 51%, although this movement was less than the movement standard error (10 points) and therefore not statistically significant.

For Indigenous females living in Major cities the employment to population ratio increased from 43% in 2009 to 49% in 2010, in Regional areas it remained relatively steady at 37% and in Remote areas it decreased 3 points to 40%, although again this movement was not significant (less than the movement standard error of 5 points).

Indigenous people participating in the Community Development Employment Programs (CDEP), who were classified by the ABS as employed, are likely to form a significant proportion of Indigenous employment in remote areas (see **National Aboriginal and Torres Strait Islander Social Survey, 2008** (cat. no. 4714.0)).

#### EMPLOYMENT TO POPULATION RATIO, Indigenous people aged 15 years and over - 2005 to 2010



For more detailed estimates of Aboriginal and Torres Strait Islander employment, refer to Tables 1 to 5 (available in Downloads).

[Previous Page](#)

[Next Page](#)

## Unemployment



## UNEMPLOYMENT

[<< Previous Section: Employment](#)

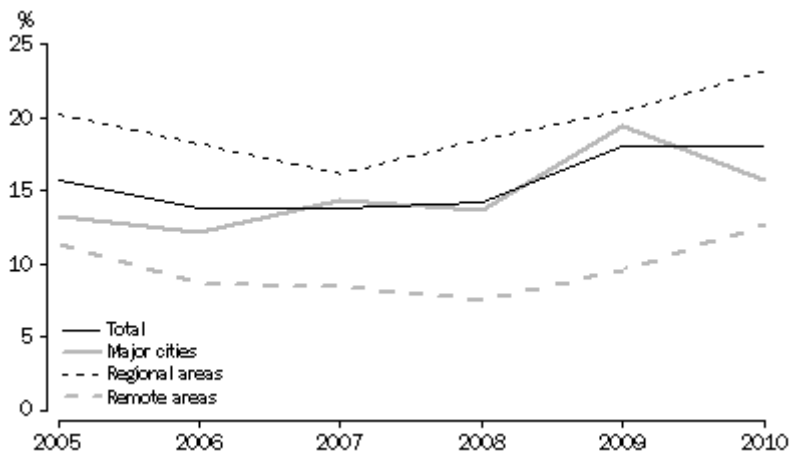
[Next Section: Comparisons with non-Indigenous Estimates >>](#)

In 2010, the unemployment rate for the Indigenous population remained steady at 18%, with an estimated 36,600 unemployed Indigenous people aged 15 years and over.

The unemployment rate for Indigenous people was 16% in Major Cities, and 23% in Regional areas. The unemployment rate for Indigenous males living in Major cities remained relatively steady at 17% whereas the rate for Indigenous females decreased 9 points to 14%. In regional areas the unemployment rate for Indigenous males increased 5 points to 27% whereas the unemployment rate for Indigenous females living in regional areas remained relatively steady at 18%.

Estimates of unemployment for Remote areas were subject to high sampling errors and should therefore be used with caution. Furthermore, Remote areas generally have an underdeveloped labour market where people often do not actively look for work and therefore are not classified as unemployed, even though they are not working and might indeed prefer to work if the labour market were different.

### UNEMPLOYMENT RATE, Indigenous persons aged 15 years and over - 2005 to 2010



For more detailed estimates of Aboriginal and Torres Strait Islander unemployment, refer to Tables 1 to 5 (available in Downloads).

[< Previous Page](#)

[Next Page >](#)

## Comparisons with non-Indigenous Estimates

[Contents >> Comparisons with non-Indigenous Estimates](#)



## COMPARISONS WITH NON-INDIGENOUS ESTIMATES

[<< Previous Section: Unemployment](#)

[Next Section: Other Sources of Information >>](#)

### INTRODUCTION

The methodology used to produce the estimates in this publication can also be used to produce estimates of the non-Indigenous population and the total civilian population. Two tables are available in Downloads that compare these estimates for 2010:

- Table 6. - Comparison of Indigenous and non-Indigenous estimates, Labour force status by Sex and Remoteness - 2010
- Table 7. - Comparison of Indigenous and non-Indigenous estimates, Labour force status by Sex and State - 2010

There are a number of considerations when making comparisons between the labour force characteristics of Indigenous and non-Indigenous people.

This section contains the following subsection :  
Comparisons with non-Indigenous population  
Comparisons with total population estimates

[Previous Page](#)

[Next Page](#)

## Comparisons with non-Indigenous population

[Contents >> Comparisons with non-Indigenous Estimates >> Comparisons with non-Indigenous population](#)

### COMPARISONS WITH NON-INDIGENOUS POPULATION

The Indigenous population has a younger age structure than the non-Indigenous population, which can make direct comparisons misleading. For instance, in 2010 only 5% of the Indigenous population aged 15 or more was 65 or older. The corresponding proportion was 17% for the non-Indigenous population.

It is possible to remove the effect of the differences in age structures through age-standardisation. However, the estimates in this publication have not been age-standardised. For this reason caution should be used if a comparison of Indigenous and non-Indigenous estimates is made. This is especially relevant in comparisons of rates and ratios, such as the participation rate, of the Indigenous and non-Indigenous populations.

Another reason for caution when comparing Indigenous and non-Indigenous estimates is the geographical distribution of the two populations. One quarter of Indigenous people aged 15 years and over lived in Remote areas in 2010. In comparison less than 2% of non-Indigenous people aged 15 years and over lived in Remote areas in 2010.

## Comparisons with total population estimates

[Contents >> Comparisons with non-Indigenous Estimates >> Comparisons with total population estimates](#)

### COMPARISONS WITH TOTAL POPULATION ESTIMATES

While the total population estimates in this publication are from the LFS, the estimates are not at all comparable with the monthly estimates released from the LFS. The monthly estimates from the LFS are produced:

- for the current month only, rather than 12 months pooled as used for the Indigenous estimates, and
- using different benchmarks to those used for the Indigenous estimates.

The estimates in this publication should be used in analysing the labour force characteristics of Indigenous people only. For information on the labour force characteristics of the Australian civilian population aged 15 years and over refer to **Labour Force, Australia** (cat. no. 6202.0).

## Other Sources of Information

[Contents >> Other Sources of Information](#)



### OTHER SOURCES OF INFORMATION

[<< Previous Section: Comparisons with non-Indigenous Estimates](#)

[Next Section: Suggestions and Feedback >>](#)

### SUMMARY

Information on the labour force characteristics of the Indigenous population are also available from:

- **Census of Population and Housing, 2006**
- **National Aboriginal and Torres Strait Islander Social Survey (NATSISS), 2008** (cat. no. 4714.0)
- **National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), 2004-05** (cat. no. 4715.0)



The table below compares estimates from these collections against the annual estimates from the LFS provided in this publication.

### LABOUR FORCE STATUS BY DATA SOURCE AND REMOTENESS, Indigenous persons aged 15 years and over - 2005 to 2010

		Total empl- oyed '000	Total unemp- loyed '000	Not in labour force '000	Civilian pop- ulation '000	Unemp- loyment rate %	Partici- pation rate %	Employ- ment to popula- tion ratio %
2004/05	NATSIHS <sup>1</sup>	143.8	26.2	123.6	293.6	15.4	57.9	49.0
2005	LFS	148.5	27.8	135.9	312.3	15.8	56.5	47.6
2006	LFS	162.5	26.2	134.0	322.6	13.9	58.5	50.4
2006	Census <sup>2</sup>	122.3	22.5	120.7	265.5	15.5	54.5	46.1
2007	LFS	160.8	25.7	146.4	332.9	13.8	56.0	48.3
2008	LFS	163.2	27.1	153.1	343.4	14.2	55.4	47.5
2008	NATSISS <sup>1</sup>	169.1	33.4	124.6	327.1	16.5	61.9	51.7
2009	LFS	161.2	35.4	157.4	353.9	18.0	55.5	45.5
2010	LFS	166.1	36.6	161.8	364.5	18.1	55.6	45.6

<sup>1</sup> Includes residents of private dwellings only.

<sup>2</sup> Excludes people in Migratory and Other Territories, those who did not state their Indigenous status, and those who did not state their labour force status.

A more detailed comparison of labour force estimates from these collections is provided in Table 8. - Comparison of estimates of Labour force status by Data source and Remoteness (available in Downloads).

Although the estimates available from the non-LFS sources are based on the same underlying concepts as the LFS, there are differences in their collection methodologies, definitions, questions and estimation procedures which affect the comparability of data. This section details the differences between the various sources.

This section contains the following subsection :

Previous Releases

Census of Population and Housing

National Aboriginal and Torres Strait Islander Social Survey (NATSISS)

National Aboriginal and Torres Strait Islander Health Survey (NATSIHS)

Future Data Collections

[Previous Page](#)

[Next Page](#)

## Previous Releases

[Contents >> Other Sources of Information >> Previous Releases](#)

### PREVIOUS RELEASES

## 1994 - 2000

Between 1994 and 2000, a question on Indigenous status was included in the LFS for one month (usually February) every year. The information collected provided a snapshot for that one month in each year, and was published in **Occasional Paper: Labour Force Characteristics of Aboriginal and Torres Strait Islander Australians, Experimental Estimates from the Labour Force Survey, 1994 - 2000** (cat. no. 6287.0).

Due to the small sample size, dissemination of Indigenous data was limited to male and females by labour force status, across broad geographical regions of Australia. Data was not released by age group or by state and territory.

Due to major differences in the estimation methodology used to produce these previous estimates, comparisons should not be made with estimates in this publication.

## 2002 - 2007

The Past Releases of this publication (also known as **Labour Force Characteristics of Aboriginal and Torres Strait Islander Australians, Experimental Estimates from the Labour Force Survey** between 2002 and 2006) use the same methodology as the current release.

However, the previous estimates are not strictly comparable with the current estimates. The current estimates, including the revisions to the estimates for 2008 and 2009, have been benchmarked to meet the latest Indigenous and non-Indigenous civilian population estimates, which are currently based on the September 2009 release of **Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021** (cat. no. 3238.0) and the June 2010 release of **Australian Demographic Statistics, Jun 2010** (cat. no. 3101.0).

The current estimates are also published based on the geographical remoteness defined in the **Australian Standard Geographical Classification (ASGC), July 2010** (cat. no. 1216.0). Estimates provided in previous releases are based on earlier versions of this geographic classification and are not strictly comparable to the current edition.

[Previous Page](#)

[Next Page](#)

# Census of Population and Housing

[Contents >> Other Sources of Information >> Census of Population and Housing](#)

## CENSUS OF POPULATION AND HOUSING

The five-yearly Census of Population and Housing is a source of information on small population groups such as the Indigenous population. The Census also provides information for small geographic regions.

However, the Census collects only a limited range of labour force information, and the questionnaire is mainly completed by people answering the questions by themselves (or by another household member on their behalf), without an interviewer present (although interviewers are used in most discrete Indigenous communities).

Because the self-enumerated questionnaire module defines unemployment less precisely than the LFS, the estimates produced are not strictly comparable with those from the LFS.

To be consistent with the estimates in this publication, the Census data used here are based on place of enumeration and exclude Indigenous people in Other Territories and Indigenous people who did not state their labour force status.

### **Population differences**

The number of Indigenous people aged 15 years and over enumerated in the 2006 Census is lower than the 2006 estimated resident Indigenous population and subsequent low-series Indigenous population projections (used for the LFS Indigenous population benchmarks).

To obtain the estimated resident Indigenous population for 2006, various adjustments were made to the 8 August 2006 Census estimates. These adjustments included accounting for non-response to the Aboriginal and Torres Strait Islander origin question, net Census undercount of Indigenous persons, and residents temporarily overseas on Census night. See the Explanatory Notes in **Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians** (cat. no. 3238.0) for further information.

As a result of the differing population bases, estimates of labour force characteristics from the Census are substantially lower for the employed, though the difference is less pronounced for the unemployed. Estimates of rates, such as the unemployment or labour force participation rate, which do not depend on having the same base population, show Census results which are quite similar to estimates from other Indigenous data sources.

### **Questionnaire differences**

While the Census aims to derive labour force status on a basis comparable with the LFS, the Census questions are not as detailed, nor as comprehensive. Largely due to space limitations on the Census form, as well as constraints imposed by self-enumeration, the Census uses a shorter questionnaire module to determine labour force status.

This shorter questionnaire module produces different estimates of employment, unemployment and not in the labour force, than the full LFS questionnaire (which was used in 80% of LFS interviews with Indigenous respondents, with a short questionnaire used for the remaining 20%, mainly in remote communities). The shortened set of questions in the Census cannot determine labour force status as precisely as the full LFS questionnaire does, resulting in some differences.

Other differences occur because of the self-enumerated nature of the Census forms and the inevitable differences in interpretation among respondents. As a result, the LFS and Census definitions differ slightly for those employed, unemployed, and not in the labour force.

[Previous Page](#)

[Next Page](#)

## **National Aboriginal and Torres Strait Islander Social Survey (NATSISS)**

[Contents](#) >> [Other Sources of Information](#) >> [National Aboriginal and Torres Strait Islander](#)

## NATIONAL ABORIGINAL AND TORRES STRAIT ISLANDER SOCIAL SURVEY

The 2008 **National Aboriginal and Torres Strait Islander Social Survey (NATSISS)** (cat. no. 4714.0) surveyed some 13,300 Indigenous people, of which 7,300 were 15 years and over. Although the underlying concepts were the same as in the LFS, the questions and definitions relating to the labour force differed slightly from those used in the LFS.

### Population differences

The NATSISS estimates were benchmarked to the low series Indigenous population projections for those aged 15 years and over living in **private dwellings** in each state and territory, at 31 December 2008. Consequently, the NATSISS benchmarks are lower than the benchmarks used for LFS annual estimates, which include people living in other types of dwellings, such as hotels and boarding houses.

### Questionnaire differences

In addition to the differing population bases, labour force estimates from NATSISS are likely to be different to the LFS due to the use of a shorter questionnaire module in the NATSISS. This questionnaire module has been found to categorise 1% of unemployed persons (as defined by the LFS) as not in the labour force. Also, there are also some situations where people who would be classified as either unemployed or not in the labour force in the LFS, are classified as employed when the reduced questionnaire module is used (about 0.1% of employed).

The NATSISS also differs from current LFS practices by specifically asking about participation in CDEP. All respondents were asked whether they were CDEP participants, regardless of whether they reported having a job in the reference week or not. Therefore, while some respondents in the NATSISS did not consider CDEP participation to be a job, they were classified as employed due to their participation in CDEP.

[Previous Page](#)

[Next Page](#)

## National Aboriginal and Torres Strait Islander Health Survey (NATSIHS)

[Contents >> Other Sources of Information >> National Aboriginal and Torres Strait Islander Health Survey \(NATSIHS\)](#)

## NATIONAL ABORIGINAL AND TORRES STRAIT ISLANDER HEALTH SURVEY

The 2004-05 **National Aboriginal and Torres Strait Islander Health Survey (NATSIHS)** (cat. no. 4715.0) labour force results were based on a total of 6,325 Aboriginal and Torres Strait Islanders aged 15 years and over from across Australia. These people were interviewed between August 2004 and July 2005.

### Population differences

The 2004-05 NATSIHS was benchmarked to the estimated Indigenous resident population living in **private dwellings** in each state and territory at 31 December 2004. This low series

population projection was based on results from the 2001 Census of Population and Housing. The 2004-05 NATSIHS sample covered usual residents of private dwellings only. Residents of dwellings such as hotels, motels, hostels and hospitals, and visitors to private dwellings, were not included in the survey.

### Questionnaire differences

The 2004-05 NATSIHS used a shorter questionnaire module to determine labour force status. Like the NATSISS, all respondents were asked whether they were CDEP participants, regardless of whether they reported having a job in the reference week or not. Therefore, while some respondents in the NATSIHS did not consider CDEP participation to be a job, they were classified as employed due to their participation in CDEP.

[Previous Page](#)

[Next Page](#)

## Future Data Collections

[Contents >> Other Sources of Information >> Future Data Collections](#)

### FUTURE DATA COLLECTIONS

In addition to the continued publication of annual estimates from the LFS, data on the labour force characteristics of Indigenous people will be next available from the 2011 Census of Population and Housing.

[Previous Page](#)

[Next Page](#)

## Suggestions and Feedback

[Contents >> Suggestions and Feedback](#)



### SUGGESTIONS AND FEEDBACK

[<< Previous Section: Other Sources of Information](#)

As part of a review of Labour Force products, we are currently seeking user feedback and suggestions about the format and contents of **Labour Force Characteristics of Aboriginal and Torres Strait Islander Australians, Estimates from the Labour Force Survey** (cat. no. 6287.0).

If you have any suggestions please contact us by email at [labourforce@abs.gov.au](mailto:labourforce@abs.gov.au) or contact Aaron Greenup by phone on (02) 6252 6525.

[Previous Page](#)

# History of Changes

**This document was added or updated on 30/06/2011.**

**30/06/2011** The day of release in all Data Cubes was updated to reflect the correct release day.

## Explanatory Notes

### Explanatory Notes

#### EXPLANATORY NOTES

##### IN THIS SECTION

Labour Force Survey Methodology and Concepts

Labour Force Survey Methodology

Benchmarks

LFS Sample

Labour Force Concepts

Employment

Unemployment

Not in the Labour Force

Data Quality

#### LABOUR FORCE SURVEY METHODOLOGY AND CONCEPTS

**1** The Australian Bureau of Statistics (ABS) has been conducting the Labour Force Survey (LFS) since 1966. Originally, the survey was conducted quarterly, before becoming monthly in February 1978. The LFS provides information on the labour market activity of the usually resident civilian population of Australia aged 15 years and over. This section provides information about the LFS methodology, concepts and definitions.

[Back to top](#)

#### LABOUR FORCE SURVEY METHODOLOGY

**2** The LFS is conducted by the ABS to provide monthly labour force statistics. The information is obtained from the occupants of selected dwellings by specially trained interviewers. The information obtained relates to the week before the interview (i.e. the reference week).

**3** Households selected for the LFS are interviewed each month for eight months, with one eighth of the sample being replaced each month. The first interview is conducted face-to-face. Subsequent interviews are conducted by telephone (if acceptable to the respondent). A responsible adult in each selected household is asked to provide information about the

labour force status of the usual residents and visitors covered by the survey. A usual resident is one who regards that dwelling as their own or main home, and who usually lives there. Persons who are away from their usual residence for six weeks or less are enumerated at their usual residence wherever possible (by obtaining information from other usual residents present at the time of the survey).

4 The scope of the LFS includes all persons aged 15 years and over except members of the permanent defence forces, certain diplomatic personnel of overseas governments customarily excluded from census and estimated population counts, overseas residents in Australia, and members of non-Australian defence forces (and their dependants) stationed in Australia. In common with other ABS household surveys, Jervis Bay Territory is excluded from the scope of the survey.

[Back to top](#)

## Benchmarks

5 LFS estimates are calculated in such a way as to add up to independent estimates of the civilian population aged 15 years and over (population benchmarks). Indigenous estimates in this publication were compiled using benchmarks from the low series population projections in **Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021** (cat. no. 3238.0). These projections are not predictions or forecasts, but are projections of the 2006 Census data reflecting the growth in population which would occur if certain assumptions about future levels of fertility, mortality, migration and unexplained growth were to prevail over the projection period.

[Back to top](#)

## LFS sample

6 In 2010 the LFS was based on a multistage area sample of private dwellings (around 29,000 houses, flats, etc.) and a list sample of non-private dwellings (hotels, motels, etc.), and covers approximately 0.33% of the civilian population of Australia aged 15 years and over.

7 The survey sample is designed so that, within each state or territory, each dwelling has the same probability of selection in the sample. The sampling fractions for each state and territory differ, in order to enable reliable estimates of the main labour force characteristics for each state and territory. For more information on the sample design, refer to **Information Paper: Labour Force Survey Sample Design** (cat. no. 6269.0), released on 1 October 2009.

8 The LFS sample is not spread evenly across Australia or across a state or territory. The sample is clustered for the practical reason of reducing the costs associated with sample maintenance and of interviewer travel between selected dwellings. The more highly clustered the sample (that is the larger the number of selected units in a small area), the cheaper it is to enumerate, but also the less reliable are estimates derived from the sample (since the sample is confined to a small area and may be less representative). The issue of clustering particularly affects the estimates for remote areas where clustering is higher than in other areas.

9 In the LFS, coverage rules are applied which aim to ensure that each person is associated with only one dwelling, and hence has only one chance of selection. The coverage rules are necessarily a balance between theoretical and operational considerations. Nevertheless, the chance of a person being enumerated at two separate dwellings in the survey is considered to be negligible.

**10** As one of a range of ABS savings initiatives for the 2008-09 financial year, there was a 24% reduction in the LFS sample size for the period July 2008 to August 2009, relative to the June 2008 sample size. The sample reduction was reinstated from September 2009 to December 2009, with December 2009 estimates being the first produced under the fully reinstated sample. Further information about the sample cut and reinstatement can be found in **Information Paper: Labour Force Survey Sample Design** (cat. no. 6269.0)

[Back to top](#)

## LABOUR FORCE CONCEPTS

**11** The labour force framework classifies the in-scope population according to their labour force status (that is employed, unemployed, or not in the labour force). The employed and unemployed categories together make up the labour force, which gives a measure of the number of persons contributing to, or willing to contribute to, the supply of labour at the time of the survey.

**12** Labour force definitions used by the ABS align closely with international standards and guidelines as specified by the International Labour Organisation (ILO). The definitions used by the ABS are outlined below. More detailed information may be obtained from **Labour Statistics: Concepts, Sources and Methods** (cat. no. 6102.0.55.001), which is available from the ABS web site <[www.abs.gov.au](http://www.abs.gov.au)>.

[Back to top](#)

### Employment

**13** Employed persons are those aged 15 years or over who, during the survey reference week, worked for one hour or more for pay, profit or payment in kind in a job or business, or on a farm; or worked for one hour or more without pay in a family business or on a farm; or who had a job but were not at work for a number of specified reasons; or were employers or self-employed persons who had a job, business or farm, but were not at work.

**14** The definition of employment specifically refers to work for at least one hour. This definition is used to ensure that any work which contributes to the national accounting measures of national production is included in the measure of employed.

**15** Persons are classified as employed based on the actual activities of each person, and this categorisation does not depend on their participation in labour market programs. Persons who participate in labour market programs are counted as employed, unemployed or not in the labour force according to how they respond to questions in the labour force survey about their actual activity in the week before the interview. Two important labour market programs are the 'work for the dole' scheme and the Community Development Employment Programs (CDEP) scheme.

**16** Under the 'work for the dole' scheme, some persons receiving income support are required to work on not-for-profit community-based projects for a number of hours per week, which, at the relevant award rate of pay, equates to the income support entitlement. The participants receive their unemployment benefit payments directly from the administering government agency and not from the organisations undertaking the community projects, and therefore the organisations do not have an employer/employee relationship with the scheme participants. Accordingly, persons participating in 'work for the dole' schemes are not regarded as being in paid employment but are considered to be undertaking unpaid work. Depending on other activity they undertake in the survey reference period, they may be classed as unemployed or not in the labour force.



**17** The CDEP scheme provides employment for Indigenous people living in remote, rural and urban areas. In a community with CDEP, the participants are paid a wage by the CDEP organisation to undertake work or training. While the types of activities undertaken might not differ greatly from those undertaken by 'work for the dole' participants, there is an employer/employee relationship between the participants and the CDEP organisation. CDEP participants are therefore treated as employed in the LFS. It is currently not possible to separately identify CDEP participants in the LFS.

**18** From July 2009, the CDEP scheme was discontinued in urban and rural areas. CDEP continues to operate in remote communities and participants employed by CDEP organisations prior to July 2009 will continue to receive wages in an employer/employee relationship until CDEP is phased out in April 2012. Participants who joined after July 2009 receive unemployment benefits instead of CDEP wages, and are considered by the ABS to be undertaking unpaid work in a similar manner to those in the 'work for the dole' scheme.

[Back to top](#)

## **Unemployment**

**19** Unemployed persons are defined as all persons aged 15 years and over who were not employed during the reference week, and either had actively looked for full-time or part-time work at any time in the four weeks up to the end of the reference week and were available for work in the reference week, or were waiting to start a new job within four weeks from the end of the reference week and could have started in the reference week if the job had been available then.

**20** 'Actively looking for work' encompasses a range of formal and informal job search activities and includes: writing, telephoning or applying in person to an employer for work; answering an advertisement for a job; checking workplace notice boards or the touch screens at Centrelink offices; being registered as a job seeker with Centrelink; being registered with a Job Network agency or any other employment agency; advertising or tendering for work; and contacting friends or relatives. People actively looking for self-employment jobs (such as looking for a business or to purchase a lease) are also treated as looking for work.

**21** People who only looked in newspapers or read job advertisements are seen as passively, rather than actively, looking for work and so are not considered unemployed. The ABS view is that 'only looked in newspapers' does not meet the active search criterion, nor does simply looking at job advertisements on the Internet. It is impossible to obtain work by looking at a job advertisement without some additional, active, job search step (for example, contacting the employer).

[Back to top](#)

## **Not in the labour force**

**22** Persons not in the labour force comprise those in the population who satisfy neither the employment nor unemployment criteria. They include persons who don't want to work for a variety of reasons, such as homemakers and retirees from the labour force, and those who cannot work as a result of a disability. It also includes people who are in hospital, prison, or other institutions.

[Back to top](#)

## **DATA QUALITY**

**23** Care has been taken to ensure that the estimates in this publication are as accurate as

possible. There remain, however, other factors which may have affected the reliability of results, and for which no specific adjustments can be made. The following factors should be considered when interpreting these estimates:

- Information recorded in this survey is essentially 'as reported' by respondents, and hence may differ from that which might be obtained from other sources or by using other collection methodologies. Responses may be affected by imperfect recall or individual interpretation of survey questions.
- The labour force characteristics of Indigenous people vary according to remoteness. Differences when comparing estimates between states and territories are therefore likely to be influenced by the distribution of Indigenous people by remoteness within the respective states and territories.
- Some states and territories have relatively small Indigenous populations, therefore the estimates are likely to be based on a very small sample which in turn may affect the data quality.
- The labour force characteristics of Indigenous people living in discrete Indigenous communities can be influenced by whether the community is participating in CDEP. Because of the small number of Indigenous communities selected in the LFS, there is the potential for wide statistical fluctuations in estimates of labour force characteristics of remote Indigenous communities over time if the sample moves from communities participating in CDEP to those which do not (or vice versa). Furthermore, communities that were selected during 2009 may have reported different labour force characteristics before and after the reforms to CDEP in July 2009.

[Back to top](#)

## Glossary

### GLOSSARY

#### IN THIS SECTION

Actively looking for work

Civilian population aged 15 years and over

Community Development Employment Projects (CDEP) scheme

Contributing family worker

Employed

Employment to population ratio

Indigenous

Labour force

Labour force status

Major cities

Not in labour force

Participation rate

Population benchmark

Population value

Relative Standard Error (RSE)

Regional areas

Remote areas

Standard Error (SE)

Unemployed  
Unemployment rate

### **Actively looking for work**

Includes writing, telephoning or applying in person to an employer for work; answering an advertisement for a job; checking factory notice boards or the touch screens at Centrelink offices; being registered with Centrelink as a jobseeker; checking or registering with any other employment agency; advertising or tendering for work; and contacting friends or relatives.

[Back to top](#)

### **Civilian population aged 15 years and over**

All usual residents of Australia aged 15 years and over except members of the permanent defence forces, certain diplomatic personnel of overseas governments customarily excluded from the census and estimated population counts, overseas residents in Australia, and members of non-Australian defence forces (and their dependants) stationed in Australia.

[Back to top](#)

### **Community Development Employment Projects (CDEP) scheme**

The CDEP scheme enables participants (usually members of Aboriginal or Torres Strait Islander communities) to exchange unemployment benefits for opportunities to undertake work and training in activities which are managed by a local Aboriginal or Torres Strait Islander community organisation. Participants in the program are therefore classified as employed.

In July 2009, the CDEP scheme was discontinued in non-remote communities where the economy is well-established. In remote communities, CDEP will continue to operate but new participants are no longer classified as employed, and the program will be phased out in April 2012.

[Back to top](#)

### **Contributing family worker**

A person who works without pay, in an economic enterprise operated by a relative.

[Back to top](#)

### **Employed**

Persons aged 15 years and over who, during the reference week:

- worked for one hour or more for pay, profit, commission or payment in kind in a job or business, or on a farm (comprising employees, employers and own account workers); or
- worked for one hour or more without pay in a family business or on a farm (i.e. contributing family workers); or

- were employees who had a job but were not at work and were:
  - away from work for less than four weeks up to the end of the reference week; or
  - away from work for more than four weeks up to the end of the reference week and received pay for some or all of the four week period to the end of the reference week; or
  - away from work as a standard work or shift arrangement; or
  - on strike or locked out; or
  - on workers' compensation and expected to return to their job; or
- were employers or own account workers, who had a job, business or farm, but were not at work.

[Back to top](#)

## **Employment to population ratio**

For any group, the number of employed persons expressed as a percentage of the civilian population aged 15 years and over in the same group.

[Back to top](#)

## **Indigenous**

Refers to people who identified themselves, or were identified by another household member, as being of Aboriginal and/or Torres Strait Islander origin.

[Back to top](#)

## **Labour force**

For any group, persons who were employed or unemployed, as defined.

[Back to top](#)

## **Labour force status**

A classification of the civilian population aged 15 years and over into employed, unemployed or not in the labour force, as defined. The definitions conform closely to the international standard definitions adopted by the International Conferences of Labour Statisticians.

[Back to top](#)

## **Major cities**

Major cities is a geographical category in the Australian Standard Geographical Classification (ASGC) Remoteness Structure. These categories are based on the Accessibility/Remoteness Index of Australia (ARIA) which measures the remoteness of a point based on the physical road distance to the nearest Urban Centre. For more information on the ASGC, see **Australian Standard Geographical Classification (ASGC)**,

**July 2010** (cat. no. 1216.0). See also Regional and Remote areas.

[Back to top](#)

### **Not in labour force**

Persons who were not in the categories employed or unemployed, as defined.

[Back to top](#)

### **Participation rate**

For any group, the labour force expressed as a percentage of the civilian population in the same group.

[Back to top](#)

### **Population benchmark**

Labour Force Survey estimates of persons employed, unemployed and not in the labour force are calculated in such a way as to add up to an independently estimated distribution of the usually resident civilian population aged 15 years and over. The independent population estimates (benchmarks) for the Indigenous population are based on the low series population projections found in **Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021** (cat. no. 3238.0).

[Back to top](#)

### **Population value**

The value that would be obtained if the whole population were enumerated under the same procedures as used in the sample survey.

[Back to top](#)

### **Relative Standard Error (RSE)**

The relative standard error is the standard error expressed as a percentage of the estimate to which it refers, and is useful when comparing the variability of estimates of different sizes.

[Back to top](#)

### **Regional areas**

Comprises the 'Inner Regional' and 'Outer Regional' categories of the Australian Standard Geographical Classification (ASGC) Remoteness Structure. These categories are based on the Accessibility/Remoteness Index of Australia (ARIA) which measures the remoteness of a point based on the physical road distance to the nearest Urban Centre. For more information on the ASGC, see **Australian Standard Geographical Classification (ASGC), July 2010** (cat. no. 1216.0). See also Major cities and Remote areas.

[Back to top](#)

### **Remote areas**

Comprises the 'Remote' and 'Very Remote' categories of the Australian Standard Geographical Classification (ASGC) Remoteness Structure. These categories are based on the Accessibility/Remoteness Index of Australia (ARIA) which measures the remoteness of a point based on the physical road distance to the nearest Urban Centre. For more information on the ASGC, see **Australian Standard Geographical Classification (ASGC), July 2010** (cat. no. 1216.0). See also Major cities and Regional areas.

[Back to top](#)

## **Standard Error (SE)**

A measure of the variation among the estimates from all possible samples, and thus a measure of the precision with which an estimate from a particular sample approximates the average result of all possible samples. The units of the standard error are the same as the variable of interest.

[Back to top](#)

## **Unemployed**

Persons aged 15 years and over who were not employed during the reference week, and:

- had actively looked for full-time or part-time work at any time in the four weeks up to the end of the reference week and were available for work in the reference week; or
- were waiting to start a new job within four weeks from the end of the reference week and could have started in the reference week if the job had been available then.

[Back to top](#)

## **Unemployment rate**

For any group, the number of unemployed persons expressed as a percentage of the labour force in the same group.

[Back to top](#)

# **Abbreviations**

## **ABBREVIATIONS**

ABS	Australian Bureau of Statistics
CDEP	Community Development Employment Projects
ERP	estimated resident population
LFS	Labour Force Survey
NATSIHS	National Aboriginal and Torres Strait Islander Health Survey
NATSISS	National Aboriginal and Torres Strait Islander Social Survey
pts	percentage points
RSE	relative standard error
SE	standard error

# Quality Declaration - Summary

## QUALITY DECLARATION - SUMMARY

### IN THIS SECTION

Institutional Environment  
Relevance  
Timeliness  
Accuracy  
Coherence  
Interpretability  
Accessibility

### INSTITUTIONAL ENVIRONMENT

For information on the institutional environment of the Australian Bureau of Statistics (ABS), including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see [ABS Institutional Environment](#).

[Back to top](#)

### RELEVANCE

This collection presents information about the labour force characteristics of Aboriginal and Torres Strait Islander Australians aged 15 years and over. The information is based on data collected in the national monthly Labour Force Survey (LFS). Revised data from previous years has also been included with this publication for comparison purposes.

[Back to top](#)

### TIMELINESS

The Labour Force Characteristics of Aboriginal and Torres Strait Islander Australians combines data collected from each monthly Labour Force Survey conducted through out the calendar year. The results obtained from combining this data is released approximately 5 months after the end of the calendar year (ie during May).

[Back to top](#)

### ACCURACY

A number of statistical issues need to be considered when using LFS estimates to describe Indigenous labour force characteristics. Some of these statistical issues arise because the LFS is designed primarily to provide reliable estimates for the whole of Australia and for each state and territory, rather than estimates for small populations. The small size of the Indigenous population, its wide dispersion, and the relatively high proportion who live in

remote areas present particular difficulties. To help in the interpretation of the estimates the publication discusses these statistical issues in Concepts, Sources and Methods.

[Back to top](#)

## COHERENCE

Apart from the information presented in this publication, information on the labour force characteristics of the Indigenous population is also available from:

- **Census of Population and Housing, 2006**
- **National Aboriginal and Torres Strait Islander Social Survey (NATSISS), 2008**  
(cat. no. 4714.0)
- **National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), 2004-05**  
(cat. no. 4715.0)

Although the estimates available from the non-LFS sources are based on the same underlying concepts as the LFS, there are differences which affect the comparability of data. The publication details the differences between the various sources in Other Sources of Information.

[Back to top](#)

## INTERPRETABILITY

The Labour Force Characteristics of Aboriginal and Torres Strait Islander Australians release contains a summary of findings (Participation, Employment and Unemployment) to aid interpretation of the results of the survey. Detailed explanatory notes, a technical note, a glossary and details of the methodology and concepts used (in Concepts, Sources and Methods) are also included to further aid in the interpretation of the results.

[Back to top](#)

## ACCESSIBILITY

The main products from this collection are a series of excel spreadsheets (available in Downloads) that are released electronically via the ABS website. Additional data may be available on request. However, the sample size of the collection, and the resulting standard errors, limits the ability for estimates to be broken down much further than what is already available in the publication.

[Back to top](#)

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070, email [client.services@abs.gov.au](mailto:client.services@abs.gov.au) or Aaron Greenup on Canberra (02) 6252 6525, email [labourforce@abs.gov.au](mailto:labourforce@abs.gov.au)

[Back to top](#)



# Technical Note

## TECHNICAL NOTE

### IN THIS SECTION

Reliability of Estimates  
Non-Sampling Error  
Sampling Error  
    Standard Error  
    Relative Standard Error  
Examples of Calculations  
    Level Standard Errors  
    Movement Standard Errors  
    Differences between Estimates

### RELIABILITY OF ESTIMATES

**1** Estimates from the LFS, as with data from all surveys, are subject to error. The data presented in this publication are subject to two sources of error:

- non-sampling error, which arises from imperfections in reporting, recording or processing of data that can occur in any survey or census.
- sampling error, which occurs because data were obtained from a sample rather than the entire population.

[Back to top](#)

### NON-SAMPLING ERROR

**2** The main sources of non-sampling error are response errors and non-response bias. These may occur in any enumeration whether it is a full count or a sample.

**3** Response errors include errors on the part of both respondents and interviewers. These reporting errors may arise through inappropriate wording of questions, misunderstanding of what data are required, inability or unwillingness to provide accurate information, and mistakes in answers to questions.

**4** Non-response bias arises because the persons for whom no response is available may have different characteristics in relation to labour market behaviour than persons who responded in the survey.

**5** Non-sampling errors are difficult to quantify in any collection. However, every effort is made to minimise these errors in the LFS by careful design of questionnaires, intensive training and supervision of interviewers and efficient operating procedures. Non-response bias is minimised by call-backs to those households which do not respond, and is compensated for in the estimation process.

**6** There are a number of other issues associated with collecting information from Indigenous persons in communities in remote areas. Although special procedures are used in some

Indigenous communities, there may still be some cultural and practical difficulties in applying standard labour force concepts in these communities. Operational issues include the high turnover of trained interviewers in remote areas, the seasonal fluctuations in population numbers as well as in employment opportunities, and high population mobility.

**7** Responses in the LFS may be given by any responsible adult in each selected household. Reporting errors may arise when the respondent provides information for another member of the household without being fully aware of their labour force details. Although this is a minor issue for the survey in general, the higher mobility of Indigenous household members may affect the accurate reporting of details such as active job search or availability for work.

[Back to top](#)

## **SAMPLING ERROR**

**8** The LFS estimates are based on information obtained from a sample of the population, and are subject to sampling error. Sampling error is the difference between the estimate obtained from a particular sample and the value that would have been obtained if the whole population were enumerated under the same procedures (referred to as the 'population value').

[Back to top](#)

### **Standard error**

**9** The most commonly used measure of sampling error is the standard error (SE). This measure indicates the extent to which a survey estimate is likely to deviate from the true population value by chance. There is a 67% chance (2/3) that the sample estimate will differ by less than one standard error from the estimates that would have been obtained if all dwellings had been included in the survey, and a 95% chance (19/20) that the difference will be less than two standard errors.

**10** The magnitude of the sampling error depends on the sample design, the sample size and the population variability. The larger the sample on which the estimates are based, the smaller the sampling error. The main contribution to sampling error for the Indigenous labour force estimates is the sample size.

**11** Movements in the level of an estimate are also subject to sampling variability. The standard error of the movement depends on the levels of the estimates from which the movement is obtained rather than the size of the movement. The standard errors for both level estimates and movements between annual estimates are provided in Tables 1 to 5 (available in Downloads). The standard errors have been derived using the group jack-knife method.

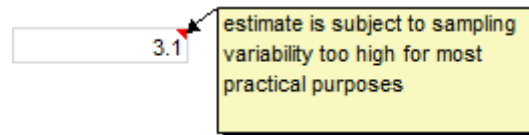
[Back to top](#)

### **Relative standard error**

**12** Another measure of sampling error is the relative standard error, which is obtained by expressing the standard error as a percentage of the estimate to which it refers. The smaller the sample estimate, the higher the relative standard error. The small sample size of Indigenous persons results in estimates of labour force characteristics which are considerably less precise and less stable than comparable aggregate estimates for non-Indigenous persons. This is reflected in the relatively high standard errors for the survey estimates derived for Indigenous persons.

**13** Very small estimates are subject to such high standard errors, relative to the size of the

estimate, as to detract seriously from their value for most reasonable uses. In Tables 1 to 5 (available in Downloads), only estimates with relative standard errors of less than 25%, are considered sufficiently reliable for most purposes. Accordingly, while included in the tables, estimates with relative standard errors of 25% or more are annotated (highlighted by a red triangle), to indicate they are subject to high standard errors and should be used with caution.



**14** Proportions and percentages (for example, unemployment rates) formed from the ratio of two estimates are also subject to sampling error. The size of the error depends on the accuracy of both the numerator and the denominator. A formula to approximate the RSE of a proportion or percentage is:

$$RSE(x/y) = \sqrt{[RSE(x)]^2 + [RSE(y)]^2}$$

**15** This formula is only valid when x is a subset of y.

[Back to top](#)

## EXAMPLES OF CALCULATIONS

### Level standard errors

**16** As an example of the calculation and use of standard errors, consider the estimate of 166,100 Indigenous persons employed in 2010. The standard error for this estimate is 6,600 (see L1 of Table 1, available in Downloads). This indicates that there is a 67% chance that the true value (the number that would have been obtained if the whole population had been included in the survey) is within the range 159,500 to 172,700 (that is, 166,100 + or - 6,600). There is a 95% chance that the true value is in the range 152,900 to 179,300 (that is, 166,100 + or - 13,200).

[Back to top](#)

### Movement standard errors

**17** Standard errors can also be used to interpret the reliability of annual movement estimates. For example, in 2008 there were an estimated 91,200 Indigenous males in employment, decreasing to 89,100 in 2009 (a movement of -2,100). The associated standard error for the movement estimate is 4,900 (see M1 of Table 1, available in Downloads). This indicates that there is a 67% chance that the true value of the movement is within the range -7,000 to 2,800 (that is, -2,100 + or - 4,900) and there is a 95% chance that the true value is in the range -11,900 to 7,700 (that is, -2,100 + or - 9,800).

[Back to top](#)

### Differences between estimates

**18** Published estimates may also be used to calculate the difference between two survey estimates (numbers or percentages). Such an estimate is subject to sampling error. The sampling error of the difference between two estimates depends on their SEs and the relationship (correlation) between them. An approximate SE of the difference between two estimates (x-y) may be calculated by the following formula:

$$SE(x-y) = \sqrt{[SE(x)]^2 + [SE(y)]^2}$$

**19** While this formula will only be exact for differences between separate and uncorrelated characteristics or subpopulations, it is expected to provide a good approximation for all differences likely to be of interest in this publication.

**20** For example, in 2009, the participation rate of Indigenous males was 62.8%, 14.3 percentage points higher than the rate of 48.5% for Indigenous females. The approximate standard error of the difference between these two estimates can be calculated as follows:

$$\begin{aligned} SE(x-y) &= \sqrt{[SE(x)]^2 + [SE(y)]^2} \\ &= \sqrt{[2.5]^2 + [2.7]^2} \\ &= 3.7 \end{aligned}$$

[Back to top](#)

---

© Commonwealth of Australia

All data and other material produced by the Australian Bureau of Statistics (ABS) constitutes Commonwealth copyright administered by the ABS. The ABS reserves the right to set out the terms and conditions for the use of such material. Unless otherwise noted, all material on this website – except the ABS logo, the Commonwealth Coat of Arms, and any material protected by a trade mark – is licensed under a Creative Commons Attribution 2.5 Australia licence